DOCUMENT RESUME

ED 477 714 IR 021 983

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TITLE	An Evaluation of the Millard High School Block Schedule.
PUB DATE	2002-12-12
NOTE	42p.
PUB TYPE	Reports - Evaluative (142) -- Tests/Questionnaires (160)
EDRS PRICE	EDRS Price MF01/PC02 Plus Postage.
DESCRIPTORS	*Block Scheduling; Educational Research; High Schools; Program Effectiveness; *Program Evaluation; *School Schedules; *School Surveys; Secondary Education; Trend Analysis

ABSTRACT

This study, administered by students in the department of Instructional Technology at Utah State University (USU), examined the block scheduling program at Millard High School (Delta, Utah). The block scheduling program, begun in the 1998-99 school year, was introduced to allow greater flexibility in scheduling, particularly for released time seminary for LDS (Latter-Day Saints) students and for the athletic teams, to provide a greater number of elective options for students, and to allow students to study subject matter material in greater depth. A side benefit was that students would spend less time in the hallway during class changes and more time in class. Some research questions included: (1) How efficiently is instructional time being used? (2) Is the amount of class time spent by students comparable to other scheduling systems? (3) How has class size been affected? and (4) What is the perceived effectiveness of the present block scheduling by important stakeholders? Recommendations drawn from the survey and focus group results include: (1) Continue to track student achievement data (i.e., GPA, SAT scores, and AP scores) to evaluate the effectiveness of the block schedule; (2) Provide ongoing in-service for teachers on imaginative strategies to use the time available; (3) Make a concerted effort to improve communications with parents about school learning and teaching in more than routine ways: Web-page (interactive), parent newsletters, surveys and reporting results, etc.; and (4) Cut time between class changes from 7 to 5 minutes and add the extra minutes to the students' lunch period. Appended are: teacher, parent, and student questionnaires; permission forms; and questionnaire results. (Contains 12 figures and 10 references.) (AEF)

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An Evaluation of the Millard High School Block Schedule

by

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Dec 12, 2002

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Description of the Program

Literature Review of Block vs. Traditional Scheduling

The advantages and disadvantages of block versus traditional scheduling in secondary education have been debated both locally and nationally. Keeping in mind that the student is the number one priority the decision regarding scheduling becomes an administrative responsibility with critical implications. Data already exist about decisions for or against block scheduling for specific schools. The best way to make such a scheduling decision is to do so based on what is viewed to be the best for the school, taking into consideration all the relevant national and local factors (Marchant and Paulson, 2001).

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The factors include: time spent in class, quality of instruction, demographics, teacher and student buy in before and after implementation, curriculum options, faculty limitations/availability, and resistance to change (Hansen, Gutman and Smith, 2000).

Data exist to support both scheduling options. However, individuals that made a change from traditional to block scheduling frequently report feeling more satisfied with the perceived benefits. While the quantitative data fails to show one method to be superior, the general attitudes of teachers and students appear to be positive toward block scheduling (Gruber and Onwuegbuzie, 2001).

Best practices

In many instances, a change in block scheduling requires a change in teaching strategies. Traditional lecture-style instruction is less effective in a longer class period as the students tend to get bored. The following list of successful teaching strategies offered by Cunningham (1996) can replace the traditional classroom lecture:

1. Warm up activities
2. Movement during the class: changing seats
3. Cooperative learning: for sharing ideas as well as socialization
4. Media Center: a "change of scenery" whenever appropriate
5. Computer lab: investigative activities or reports, etc.
6. Videos: when appropriate, an entire 90-minute film
7. Other media: music, speeches, poems, plays, novels and drills etc.
8. Large group discussions: guided, higher-level questions
9. Interactive lectures coupled with discussion
10. Thematic integration
11. Peer teaching: students who tutor lower achievers
12. Guided practice
13. Discovery method/creative projects
14. Games and puzzles as transitional activities

(cited in Ruttan, Mondfrans and Newbold, 1999)

A lengthened preparation period is often part of block scheduling. Since American teachers are traditionally given less time for classroom preparation than their colleagues throughout the world (Ruttan, Van Mondfrans and Newbold 1999), this time is usually welcomed enthusiastically by the teachers.

However, more classroom preparation time does not guarantee that better teaching methods will be used during the block time. The schools that show the most initial success in implementing block scheduling are the schools that offer some training for teachers. The skills that teachers value in an alternative schedule include:

- the ability to develop a pacing guide for the course in nine-week periods, which includes weekly and daily planning;
- the ability to use several instructional strategies effectively;
- the skill to design and maintain an environment that allows for great flexibility and creativity;
- the desire and skill to be an effective classroom manager; and
- the freedom to share the ownership of teaching and learning with the students

(Queen, 2000)

In addition to initial training, it is important that teachers have an opportunity to regularly share successes and concerns. This practice generally increases a teacher's sense of commitment to block scheduling (Cunningham and Nogle, 1996).

Many schools find that block scheduling allows the students to participate in more extra-curricular activities. Some schools even dedicate an entire day, usually Friday, to activities (Cates, 2000). Parent input and ownership should also increase since the parents will often be involved in these new extra-curricular activities (Cunningham and Nogle, 1996). Although more activities and electives are available to students in a block schedule, many students will opt to finish high school earlier than they could under a traditional schedule.

National Trends

There continue to be differences of opinion regarding advantages and disadvantages of block vs. traditional scheduling in secondary education. Keeping in mind that the student is the number one priority, it becomes an administrator's responsibility to make decisions for or against block scheduling for specific schools based on the data that already exists. The best scheduling practices vary from school to school (Marchant and Paulson 2001). The following factors should be included in the decision to adopt alternative schedule: time spent in class, quality of instruction, demographics, teacher and student buy-in before and after implementation, curriculum options, faculty limitations/availability, and resistance to change (Hansen, Gutman & Smith 2000).

Salvaterra, Lare, Gnall and Adams (1999) observe that, "For most school districts the desired goal for education has been higher test scores rather than enhanced student learning. The focus on SAT scores and monetary rewards connected to better scores indicate that good teaching and learning are measured for some educators by scores on standardized tests." However, there is no quantitative data that conclusively indicates that the adoption of block scheduling leads to increased test scores (Arnold, 2002; Gruber and Onwuegbuzie, 2001). It therefore becomes difficult to determine the clear advantage of block scheduling solely on the basis of test scores.

Block scheduling seems to be more effective for different groups of students. Average and high achievers who are satisfied with their academic achievement tend to perform better in a block schedule environment and show the highest support for the change to block scheduling. Lower achievers who are dissatisfied with their performance in school often struggle more while adjusting to and performing within a block schedule (Marchant and Paulson, 2001).

Anderson, Brozynski and Lett (1996) suggest ten outcomes that often accompany a change to block scheduling. These ten outcomes are: 1) increased average GPA, 2) increased junior-class scores in reading, math, science, and social studies, 3) increased standardized test scores, 4) increased average daily attendance, 5) decreased number of discipline referrals, 6) increased number of classes taken, 7) increased student time on task, 8) increased supervised homework in class and less to take home, 9) increase in teacher-student engagement resulting in three or more activities during a class period, and 10) improvement in school-community relations. While there is little quantitative research that supports these ten changes, nonetheless, these are some possible changes (cited in Ruttan, Mondfrans and Newbold, 1999).

Data exists to support both schedule options; however, those individuals that made a change from traditional to block scheduling report feeling more satisfied with the perceived benefits. While the quantitative data fails to show one method to be superior, the general attitudes of teachers and students appear to prefer block scheduling (Gruber and Onwuegbuzie, 2001).

Background on the Study

The Millard School District, based in Delta, Utah, draws students from all of Millard County. There are three high schools currently operating in the district: Delta High School (784 students), Millard High School (358 students), and the very small, formally private Eskdale High School (28 students) (State Board of Education Directory, 2001).

The block scheduling program in effect since 1998-99 was introduced as a reform to allow greater flexibility in scheduling, particularly for released time seminary for LDS students and for the athletic teams, to provide a greater number of elective options for students, and to allow students to study subject matter material in greater depth. A side benefit was that students would spend less time in the hallway during class changes and thus more time in class.

The "block" at Millard High School follows the schedule below for all students:

		Minutes
1st Period	8:00 – 9:25	85
Channel One	9:25 – 9:35	10
2nd Period	9:42 – 11:07	85
Lunch	11:07 – 11:33	26
3rd Period	11:40 – 1:05	85
4th Period	1:12 – 2:37	85
Total Instruction Time		350 min or 5 hrs 50 min

The schedule alternates between A and B days, with alternate weeks having 2 A days and 3 B days or 3 A days and 2 B days.

The schedule it replaced is as follows:

		Minutes
1st Period	8:15 – 9:04	50
Channel One	9:04 – 9:14	10
2nd Period	9:19 – 10:08	50
3rd Period	10:13 – 11:02	50
4th Period	11:07 – 11:56	50
Lunch	11:56 – 12:23	(27 min)
5th Period	12:28 – 1:17	50
6th Period	1:22 – 2:11	50
7th Period	2:16 – 3:05	50
Total Instruction Time		360 min or 6 hours

The broadcast over Channel One is considered as instructional time. Under the 7 period system, students are given 5 minutes to change class, and 7 minutes under the block schedule.

It is also worth noting that this year (2002 – 2005) is only the first year that all students have experienced block scheduling for their entire high school involvement.

Methodologies and Procedures

The study was undertaken by the Department of Instructional Technology at USU at the request of Dr. Ray Timothy, Superintendent of the Millard School District. The study examined the block scheduling program at Millard High School in operation since the 1998 – 99 school year.

Basic steps followed in conducting the study are shown in the block-flow diagram on the last page of this report.

Research Questions

The basic research questions were provided in telephone conversations with Dr. Timothy on Oct 7. The questions are as follows:

1. Examine the effectiveness of the present block scheduling system, to include the following questions:
    a. How have instructional strategies evolved to accommodate the block scheduling?
    b. How efficiently is instructional time being used?
    c. Are teachers using their planning time effectively?
    d. Has there been an increase in early graduation requests by students wanting to exit to minimum wage jobs?
    e. What has been the impact on expenditures (per pupil)?
    f. Is the amount of class time spent by students comparable to other scheduling systems?
    g. How has class size been affected?

2. What is the perceived effectiveness of the present block scheduling by important stakeholders:
    a. Parents
    b. Students
    c. Staff, to include teachers, administrators, clerical and custodial people.
    d. School board

3. What is the impact of the block scheduling upon outcome measures?
    a. Test results on SAT and End-of-level tests
    b. Graduation rates
    c. Levels of participation in Advanced Placement courses and concurrent enrollment courses
    d. Additional impacts: extracurricular programs, decreasing time out of class, disciplinary issues, making sure students have enough choices for classes they sign up for.

4. What are "best practices" encountered nationwide related to scheduling? What are discernible trends in scheduling practice?

The purpose of the study was addressing these questions, providing guidance for data collection, analysis, reporting, and conclusions.

The study was undertaken as a class project of 21 students in Instructional Technology 6240, Instructional Analysis, taught by Dr. Nick Eastmond. Additional help and supervision came from Dr. Byron Burhnam, Department Head.

Quality Control

Part of the needs assessment/evaluation strategy proposed by Witkin and Altshuld (1995), and Eastmond (1979), is to use a Quality Assurance Committee. At the suggestion of Mr. Dennis Alldredge, Millard High School Principal, the existing 14-member School Improvement Committee was asked to perform that function. On Oct 22, Dr. Eastmond met with the group, invited their participation, and showed them draft copies of the proposal data collection instruments. The group provided suggestions to help with a pilot test of the written questionnaire, as well as suggestions for improving certain specific questions. At the conclusion of the study, this group was asked to hear the report and react to a draft of the study findings.

Before undertaking the evaluation project for Millard High School, the graduate researchers in the department of Instructional Technology at Utah State University received approval from the university's Institutional Review Board (IRB). Permission forms are included in Appendix C.

Survey Methodologies and Procedures

The questionnaire was primarily designed by students in the department of Instructional Technology at USU. The survey was written in adherence to the principles of Witkin and Altschult (1995), practitioners in the field of needs assessment and evaluation. After the survey was written, it was test piloted with a group consisting of 14 people: parents, teachers and students. With the approval of Dr. Burnham, the graduate researchers made the necessary changes and updates to the questionnaires.

Survey Structure and Administration

The study used three questionnaires: one geared towards students, one towards parents, and another towards teachers of Millard High. A copy of each questionnaire is given in Appendix A. There were approximately 20 questions in each of the three questionnaires. The questions were based on a 1-7 scale where 1 indicates strong disagreement and 7 indicates strong agreement. Along with the individual questions, the participants were given an opportunity to provide any additional comments.

Focus Group Methodologies and Procedures

The focus group process was primarily designed and performed by six certified graduate researchers in the department of Instructional Technology at Utah State University. The group received one-on-one training and feedback on focus group procedures and methodologies from Dr. Byron Burnham prior to conducting the group at Millard High School. A copy of the protocols for focus group interviews is provided in Appendix B.

Four focus groups were conducted: teachers, parents, current students and graduated students. Each of the groups was asked various topical questions on their areas of emphasis. The responses were recorded both by audio and by hand.

Data Analysis Procedures

After the survey data were collected, they were entered into Microsoft Excel and then tabulated in SPSS (Statistical Package for the Social Sciences) analysis program for evaluation and analysis by graduate researchers in the department of Instructional Technology from Utah State University.

The comments are reported here in quotations and are drawn from written comments on the questionnaire (Appendix A). The data drawn from focus group meetings are in italics.

Results

Usable questionnaires were received from over 200 individuals. The total number of individuals surveyed and the percentage response rate are given in Table 1 below:

Table 1: Number of usable questionnaires and rate of return from the written questionnaire

	No. Selected	% Returned
Students	120	100
Parents	90	69
Faculty	25	92
Total	235	

It is important to note that the parents selected included parents who have students who attended both traditional and block scheduling.

For the focus groups, all but one was conducted on-site, at Millard High School, on Nov 7 and 8. The one exception was the focus group conducted at Utah State University with graduates of Millard High School now attending Utah State University.

Table 2: Individuals involved in Focus Group Interviews

	No.	No. invited
Students (from Fillmore)	11	12
Students (from outlying communities)	11	12
Parents	8	12
Faculty	12	12
Graduates attending USU	6	9
Total	48	57

It is worth noting that all the graduates of the group interviewed at USU had experienced one or more years of traditional scheduling and one or more years of block scheduling.

Impact on Expenditures (per pupil)

The only information available was for the district as a whole, but the data indicates some interesting trends. In the school year beginning fall of 1996, the district expended an average of $4,270 per student. That number increased slightly (4.56%) in 1997 to $4,474. The national increase in spending was 9.26%, with the entire state of Utah increasing by an average of 5.02%. In 1998, the year of the change, the district spent $4,824 per student, an increase of 7.26% from the previous year. Nationally, there was almost half of the increase at 3.63%, while the state of Utah average increase was a mere 2.9%. The following year, after the Block Schedule change had gone into effect, the district spent $5,237 per student, which is an increase of 7.89% from the previous year. The national average only increased by 0.11% during that year, which the state of Utah increasing an average of 2.69%. In 2001, the amount again increased to $5,522, a difference of 5.16%, while the national average was only a 2.70% increase and the state of Utah only increased by 3.88%.

Students classified as "at risk" based upon qualifying for free or reduced lunch make up 36% of the student body at Millard High School (all 4 grades) (Source: Carol Kimball, personal conversation, 12/10/02).

In surveys of student interest, some 57% of senior students indicate their intention to go on to college. The actual number who attend higher education is a lower percentage, something like 38% (Source: George Richardson, personal conversation, 12/10/02).

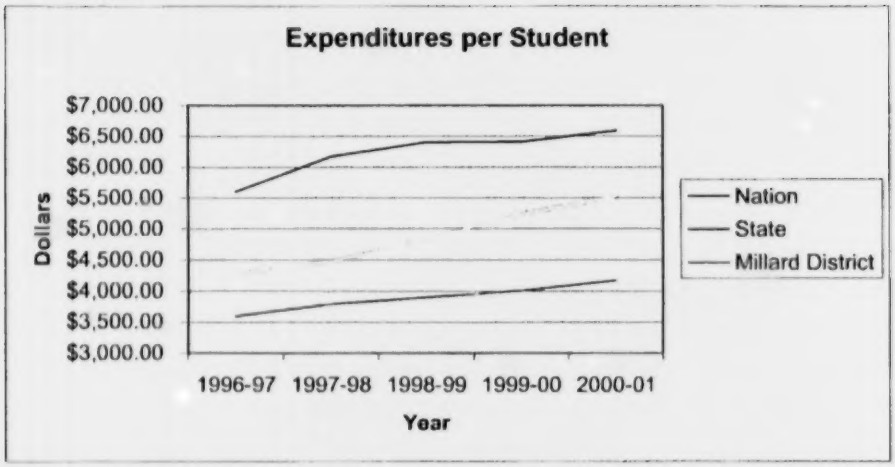
Note—This information was obtained from the Millard School District website, http://www.millard.k12.ut.us/report/00-01/expenditures.htm

Table 3

Expenditures per Student

	1996-97	*1997-98*	*1998-99*	*1999-00*	*2000-01*
Nation	$5,597.00	$6,168.00	$6,400.00	$6,407.00	$6,585.00
Increase % from previous year		9.26%	3.63%	0.11%	2.70%
State	$3,597.00	$3,787.00	$3,900.00	$4,008.00	$4,170.00
Increase % from previous year		5.02%	2.90%	2.69%	3.88%
Millard District	$4,270.00	$4,474.00	$4,824.00	$5,237.00	$5,522.00
Increase % from previous year		4.56%	7.26%	7.89%	5.16%

Figure 1



Research Question:
What is the impact of the block scheduling upon test results and end level tests?

Survey Question:
The current block schedule allows the student to be better prepared for the American College Testing (ACT) and end-level tests.

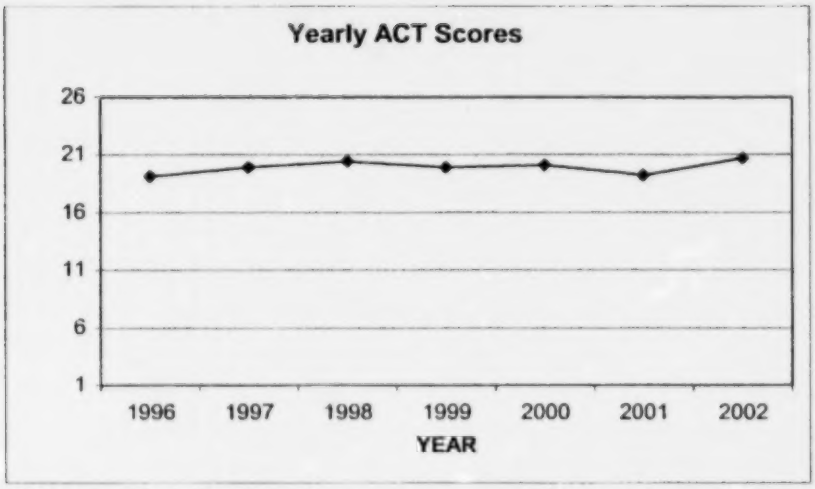
When responding to the question above, 54% of parents, 35% of teachers, and 77% of students strongly agreed or agreed that the current block schedule allows teachers to better prepare students for the ACT and also helps students to better prepare for the ACT. The majority of parents and students agree that it does, while less than the majority of teachers strongly feel the block schedule prepares students for end level tests.

Survey Question:
The current block schedule helps the teacher in preparing the student for ACT and end-level tests.

When responding to the above question 52% of parents, 50% of teachers, and 77% of students strongly agreed or agreed that the block allows students to better prepare for the ACT exam. It should be noted that 35% of the teachers believe there is no change in the ability of teachers to better prepare students on block schedule as compared to the previous 7-period a day schedule. Thirty percent of the teachers also believe that there is no change in the students' ability to prepare for the ACT on the block schedule.

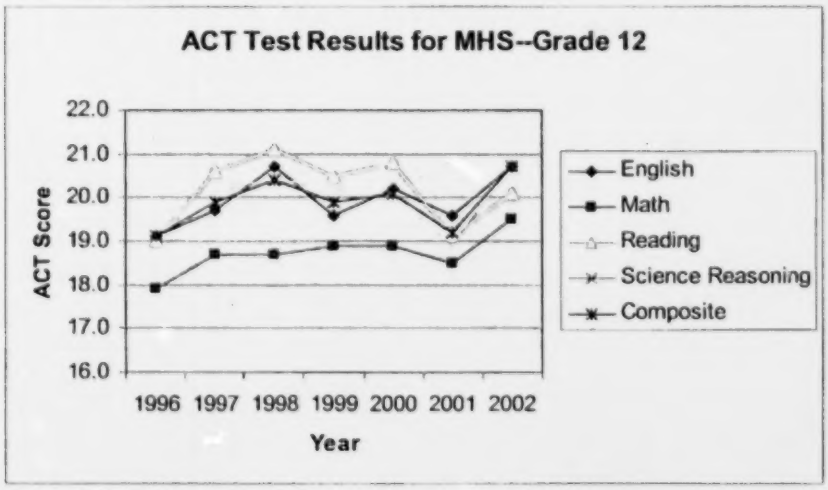
In 1996 and 1997, the years prior to the block schedule change, the ACT scores were 19.1 and 19.9, respectively. In 1998, the year the change occurred, scores moved up to 20.4. In 1999, the scores were down to 19.9 again. The year 2000 brought scores up to 20.1. In 2001, they were down again to 19.2. Finally, in 2002, the scores hit a seven-year high of 20.7.

Figure 2



The data indicate that there was no real change in overall performance of students on their ACT testing from the years prior to the block schedule implementation as compared to the post-Block Schedule time period. The year the actual change occurred was the second highest ACT achievement that the graduating class had received for the seven-year time period analyzed.

Figure 3



Students at the focus group meeting said that they have more time to take notes during longer class periods. Others say that they are more prepared for longer classes at college as a result of the block. One student also commented that because of longer class periods they also have time to practice for the ACT for 25 minutes in their class.

Impact of block scheduling on SAT scores

In the year prior to the change to the Block Schedule, the Composite Stanford Achievement score for Grade 11 at Millard High School was in the 55th percentile, nationally, which is considered in the top average, when compared to peer high schools in the state of Utah; (Peer high schools are considered high schools with a similar student population) Social Sciences were in the 68th percentile, which is above the average of the peer schools; Math, Reading, and Language were in the 63rd, 50th, and 41st percentiles,

respectively, which is average among peers; and Science was in the 53rd percentile, which is in the low average.

The year immediately following the Block Schedule change, Composite SAT scores dropped to the 45th percentile—low average compared to peer schools. In all of the subjects—Math(57th), Reading(41st), Language(35th), Science(53rd), and Social Science(42nd)—there was a drop to low average among peers .

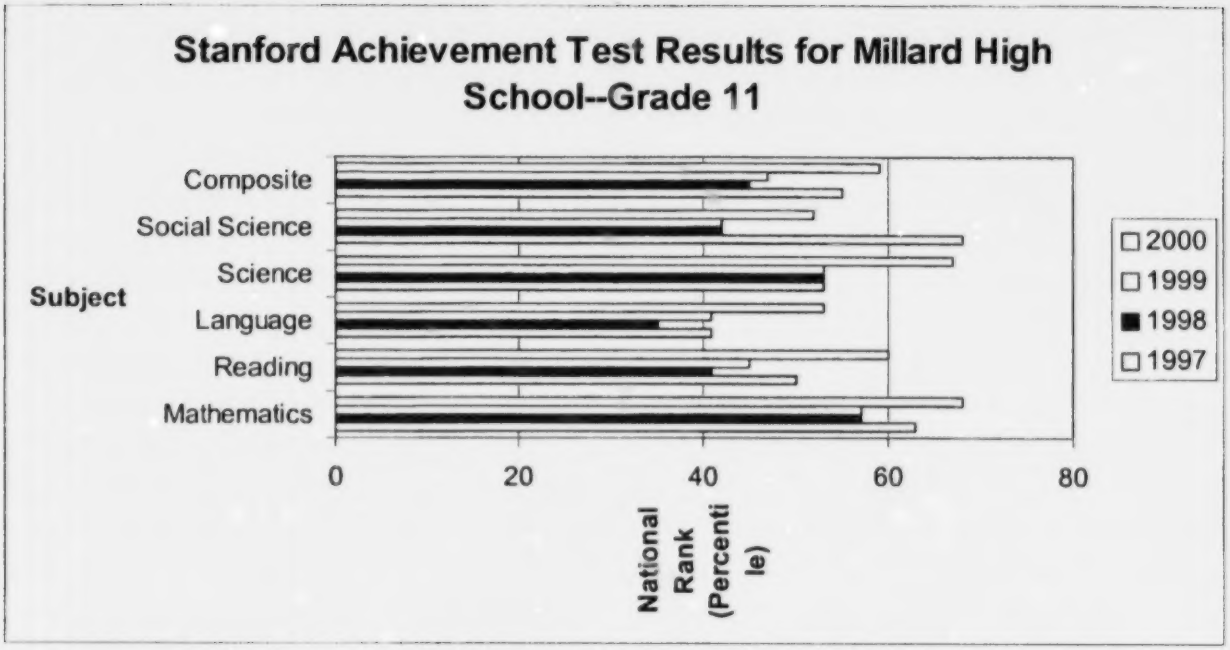
The next year, Composite SAT scores were again in the low average, hitting the mark of 47th percentile. All of the subjects except one were in the low average again, with Math at 57th, Reading at 45th, Science at 53rd, and Social Science at 42nd. The exception was Language, which raised to 41st, average among peers.

Two years after the Block Schedule change had taken place, the Composite SAT scores hit 59th percentile, with is the top average of the peer schools. All of the subjects were up, with Math (68th), Reading(60th), and Science (67th) in the top average of peers, Social Science was average among peers hitting the 52nd percentile, and Language was above the average of peer schools, in the 53rd percentile.

The scores available indicate that there was initially a major drop in the SAT scores in the first year of the Block Schedule change. The scores hit some of the lowest in several years. It can be concluded that the change had a negative impact on the SAT scores, initially, but once adjustments were made by both the faculty and the students, the scores went to all time highs.

There are certain variables to consider when looking at the data available. First, the scores analyzed are from different student populations. Although there are some similarities among them (geographic region, basic demographics, teachers/teaching styles, changes in faculty) there are numerous differences that could have impacted the scores. Some of those differences could be related to the block scheduling; for instance, adjustment of students to the schedule impacting study habits and adjustment of teachers to the schedule impacting teaching styles and methods.

Figure 4



Research Question:
What is the impact of the block schedule on graduation rates?

Survey Question:
The current block schedule enhances the students' chances of graduation.

Of the three groups surveyed, 64% of parents, 77% of teachers, and 86% of students strongly agreed or agreed that the block schedule enhanced the students' chances of graduation. To quote the response of one student: "[The block schedule] Gets you prepared for life. If you don't like high school you can graduate from high school a year earlier, if you know what you want to do."

There has not been a dramatic increase in early graduation requests. In fact, over the last three years, there have been only 1 or 2 early release requests from students. During that time, they were taking college credit courses to get an early start on their further education. In actuality, they still participated in the graduation commencement exercises, but had already finished the credit coursework a semester or two early.

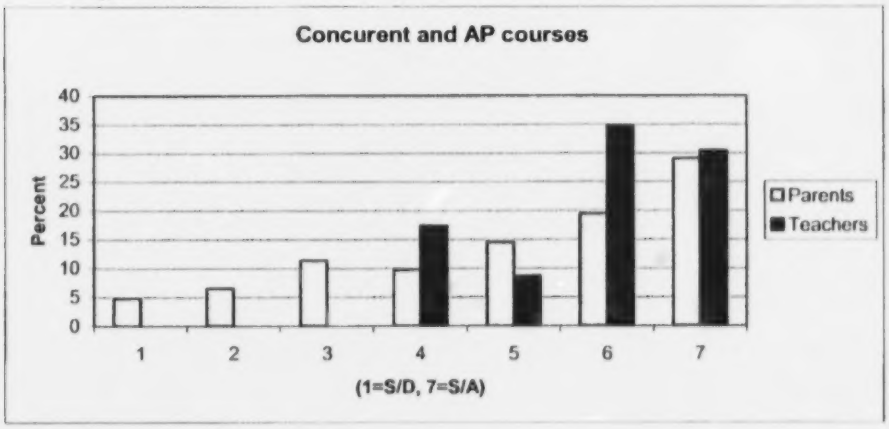
The graduation requirements have also been raised since the implementation of the block schedule. With the increase in class periods from 7 per semester to 8 per semester, the students have the potential for taking an additional 4 elective courses during their high school career. The total requirement for graduation was increased from 24 credits to 28 credits, increasing the need for students to take elective courses in order to graduate.

Research Question:
What impact does the block scheduling have on levels of participation in Advanced Placement courses and concurrent enrollment courses?

Survey Question:
Does the current block schedule allow students greater flexibility to take concurrent and AP courses?

Teachers and parents agree or strongly agree that it does. However no quantifiable data is provided regarding the students opinions, as that question was not asked directly.

Figure 5



Teacher Survey – Mean 5.86

Parent Survey – Mean 5.36

Student Survey – No Data

While there were no teacher comments on this topic from parents or teachers, several students commented about their belief that more college classes are now available with the current block schedule. One student says that he/she likes the block schedule because it is easier to take more EdNet classes.

Teacher comments:

- "[the block schedule allows for] more course choices for the students."
- *"Because of release time, it lets them take applied tech classes, and more electives."*
- *"Maybe the offerings are limited but we have such a high percentage of kids here who are involved in release time [seminary classes] that back when the kids had seven classes... it allows the kids to take more electives."*

Parent comments:

- "I like the availability it gives for the Ednet class."
- *"Release time was an issue with the 7 period for a few students and the block has made it easier."*
- *"Release time is the positive side of the block. More selections with release time."*

Student comments:

- "I think we should be able to take more AP classes."

Survey Question:
The current block schedule benefits me as I prepare to enter college.

Students of MHS were asked if they felt that the block also prepared them for a future in college. Eighty-seven percent of the students strongly agreed or agreed that the current schedule is preparing them for college. However, many of the sentiments expressed in focus groups were of a different mind.

Parent comments:

- "A child on the 7 period was more prepared for college than a child in college that was in the block schedule."

- "This is why my kids are struggling in college. They never learned these skills. I think that Delta High School is still in the 7 period schedule and their test scores are higher."

Teacher comments:

- "Two classes a week won't make them successful in college. We can't cover all the material."
- "Block schedule prepares them for college. Good students go home and prepare and mediocre kids have an opportunity to procrastinate."
- "[The block scheduling] Prepares them for college."

MHS graduate comments:

- "I would come up here [to USU] with my sister, so it wasn't a big shock for me and I think that [block scheduling] prepared me more for how long I would be sitting in class, cause when I looked at my Tuesday/Thursday schedule I'm all, 'I'm going to be in class for that long?' But if I was to think 45 minutes, that's short, I mean that's really short, so I think it was really good for that."
- "Yeah, the longer period helped us prepare for sitting in lectures here, but I don't think Millard high was very good college prep school."
- "I didn't learn any study skills. [At USU] I took a class just to learn how to study. It [the lack of preparation in study skills] is because of the teachers, not the block schedule."

Focus Group Question:
How does the block schedule prepare students for vocational occupation?

There are no formal statistics to report for how any of the three groups felt that the block schedule prepared students for a vocational orientation, but there are a number of comments on the impact of the block schedule on vocational classes that are worth noting.

Parent comments:

- *"The 7 period schedule was very hard for vocational classes."*
- *"The block is very positive for vocational classes."*

Teacher comments:

- *"[The block schedule allows] more course choices for the students. Because of release time, it lets them take applied tech classes and more electives."*
- *"In shop it's excellent [They have time to work on projects]."*

MHS graduate comments:

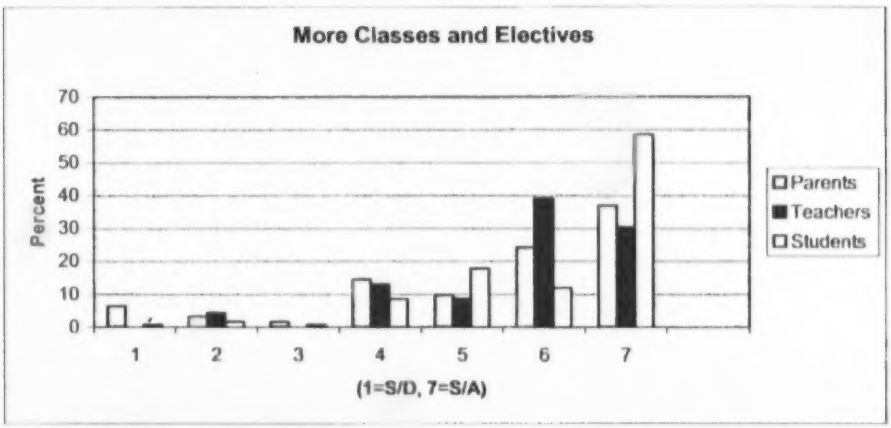
- *"[The block schedule is] better for classes like shop."*

Research Question:
What impact has the block scheduling had on extra curricular programs?

Survey Question:
I like the block schedule because it gives me (the student) more choices in the classes that I (he/she) can take.

Figure 6 shows a strong sentiment of agreement with the statement: "I like the block schedule because it gives me more choices in the classes I take."

Figure 6



Teacher Survey – Mean 5.77
Parent Survey – Mean 5.4
Student Survey – Mean 5.9

Teacher comments:

- *"In special education, the block schedule allows some flexibility with class time."*
- *"A shortage of teachers, not the scheduling, severely limits the range of classes [offered]."*

Parent comments:

- *"This school doesn't have enough extra classes to choose from, [so] kids end up in various home economic classes."*

Student comments:

- "[the block schedule] would give me less of the electives I need to help me with a scholarship."

Note that there is only one negative comment about the block schedule from all of the student surveys (see appendix).

Focus Group Teacher comments:

- *"More classes and more options."*
- *"Less electives but it has nothing to do with the block."*

Focus Group Parent comments:

- *"The block scheduling is very positive for vocational classes."*

Focus Group Student comments:

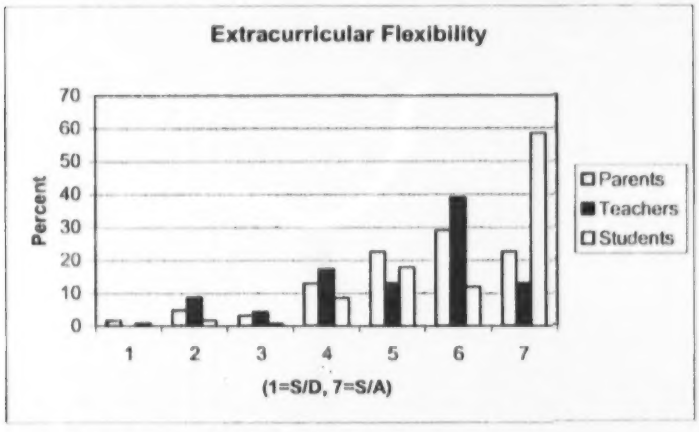
- *"You can explore through electives and center it around the career you want."*
- *"More college credits are available."*

Survey Question:

The block schedule gives the student more flexibility in participation of extracurricular activities.

Figure 7 shows a strong agreement that the block schedule gives the student more flexibility in participation of extracurricular activities.

Figure 7



Teacher survey – Mean 5.14
Parent survey – Mean 5.35
Students survey – Mean 6.1

Teacher comments:

- *"When they [students] miss a class for a sporting activity, they feel that we are being unrealistic expecting them to stay current with the class. Many of them think that because a team takes four or five students from a class of twenty that is out of line in continuing to teach the rest of the students."*

Parent comments:

- *"In High School students are so involved it [block scheduling] gives an extra day to complete assignments if other activities conflict with the schedule."*

Student comments:

- *"I feel that the block schedule provides students enough time to complete assignments especially for those who work or are in sports. I definitely love and enjoy block schedule."*
- *"I love the block schedule. It allows me to do chores and farm work at home then do homework the next day if necessary."*
- *"I have more time to get work done."*

During the focus group meeting, teachers did not comment on extracurricular classes; however, they did address vocational and PE classes that seem to be ideal for block scheduling. Parents did not discuss any issues regarding extracurricular activities with the block schedule. Students, by comparison, were much more vocal about extracurricular activities. *"Sports are easier." "Keeping up with jobs would be hard (on the 7 period schedule) because there would be too much homework."*

Significant findings from the survey comments and focus groups provide opposing views when asked questions regarding scheduling issues.

Teacher comments:

- *". . . the day off from Math and foreign language is detrimental to student learning."*

- *"The block schedule only gives them an additional day to procrastinate homework."*
- *"I feel that in subjects such as math and science the students need the repetition every day rather than every other day. If they miss one day in five for a week it is not as damaging as missing one in three or one in two for a week."*
- *"It's hard to not always see the students. They lose a lot during the gap between classes, but I wouldn't trade it [less gap between classes] for the longer class period, because we can do more in one period of time."*

Parent comments:

- *"I like the block schedule; it is less stressful on my children."*
- *"The block schedule gives them less homework per day – and when they get homework they have 2 days to do it! I think you should keep block schedule."*
- *"When athletes travel on a Tuesday /Thursday schedule, like basketball, they miss a full week of class. If they miss a day in the 7 period it is not as bad as in the block."*
- *"Block schedules, switching between A and B, does help in not missing the same class all the time."*

Student comments:

- *"It's hard to have music classes every other day, even though it's twice as long. The block schedule is effective, and helps the students to learn the material, and gives them an extra day to complete assignments with busy schedules."*
- *"It's easier to make up a missed day."*
- *"It's easier to forget assignments between classes."*

Note also that several students and parents commented during the focus groups on the need for a longer lunch period.

Research Question:
Have instructional strategies evolved to accommodate the block scheduling and how effective is instructional time being used?

Survey Question:
Teachers sometimes allow students to do homework in class.

Some 76% of the parents and 74% of the students surveyed agreed or strongly agreed that teachers allow homework to be done during class time. A similar 73.8% of the teachers surveyed indicated that they allow students to work independently during class time. Students generally like homework to be completed in class, because they have more teacher contact and direction in the presence of the teacher. One student said, "after the math teacher lectures and I don't understand, he will come around and help me one-on-one." Some parents believe that "the block schedule gives them [students] less homework per day – and when they get homework they have 2 days to do it!" On the other hand, there are parents who have some concerns over the same issue. One parent complained about the lack of homework and that the students are "not challenged".

Parent comments:

- *"The block schedule gives them less homework per day – and when they get homework they have 2 days to do it! I think you should keep block schedule."*
- *"What homework? There was little homework done even on the 7 period. My kids have not learned how to read a text book, take notes, or do homework. They just do worksheets in class and are not required to do anything else. They don't know how to get together in a study group. They actually believe that Middle school was harder because of homework."*
- *"This is why my kids are struggling in college. They never learned these skills [of working on assignments on their own]. My kid likes it because it is easy and involves no homework.*

When I don't see homework, I can't see what is happening and they are learning in school."

- *"The teachers are still teaching for the 45 minutes they were used to teaching and using the rest of the class for the kids to do homework.*

Student comments:

- *"Me and all my friends like the block schedule because it gives us more time to do our homework."*
- *"I feel that the block schedule gives students enough time to complete assignments, especially for those who work or are in sports."*

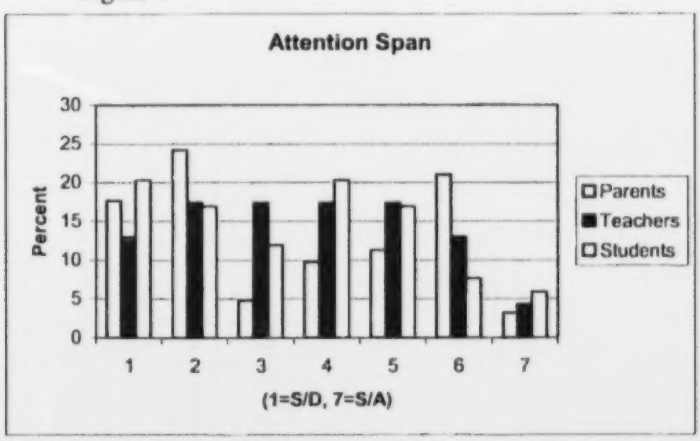
Teacher comments:

- *"I think it helps the students give more time to each class, and there is more individual as well as class help after instructions have been given."*
- *"Some parents get upset when I assign homework. They say, "I thought the reason we went to the block schedule was so there would be less homework.""*
- *"The only complaints about homework comes from parents saying, "There's too much homework." Parents want the kids on the ranch."*

Survey Question:
Students find it difficult to pay attention during the whole class period.

Another area of concern to parents and students is the attention span required of students in a 90-minute block. Although 47% of the parents surveyed disagreed or strongly disagreed that their students have difficulty paying attention in a longer class period, 49% of the students acknowledged that it is difficult to pay attention during the whole class period. During a focus group meeting, students said they either sleep or use the extra time in class to do homework. However, there were more teachers who felt that students do not have trouble paying attention in class.

Figure 8



Teacher survey – Mean 3.65
Parent survey – Mean 3.53
Students survey – Mean 3.43

Parent comments:

- *"Attention and boredom is a concern."*

Student comments:

- *"Paying attention – they would have to wake us up. It helps to be able to move."*

Teacher comments:

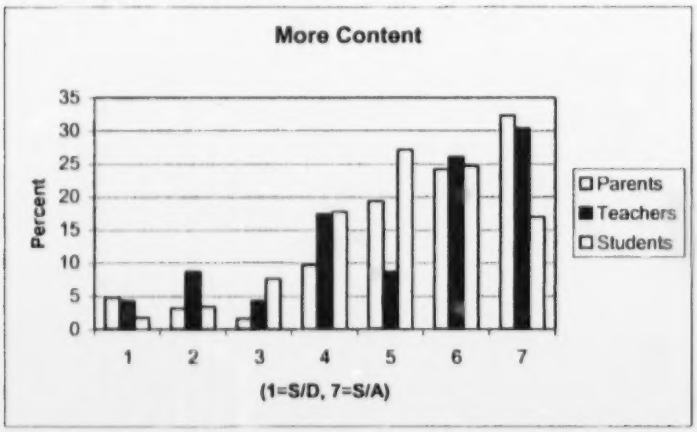
- *"The kids here aren't really academic; it's a problem, not all that effective. The kids fizzle out after just a half hour, it makes the class long."*
- *"Students in younger grades have more trouble with the long classes, attention wise."*

During the focus group meeting, the Millard High graduates who are already enrolled in USU generally expressed feelings of boredom ar.d remembered having had difficulty in paying attention in the block schedule, while some students were of the opinion that their attention span depended on the subject and the teacher.

Survey Question:
The current block schedule allows more content to be taught in class.

A full 65.2% of the teachers agreed or strongly agreed that the current block schedule allows more content to be taught in class. Roughly three-quarters of the students and 75.9% of the parents surveyed are of the same opinion. A student added, "In math – in the 7 block we would only have the lecture, but we wouldn't have the tutoring; during block schedule they wouldn't cover as much material."

Figure 9



Teacher survey – Mean 5.17
Parent survey – Mean 5.49
Students survey – Mean 5.91

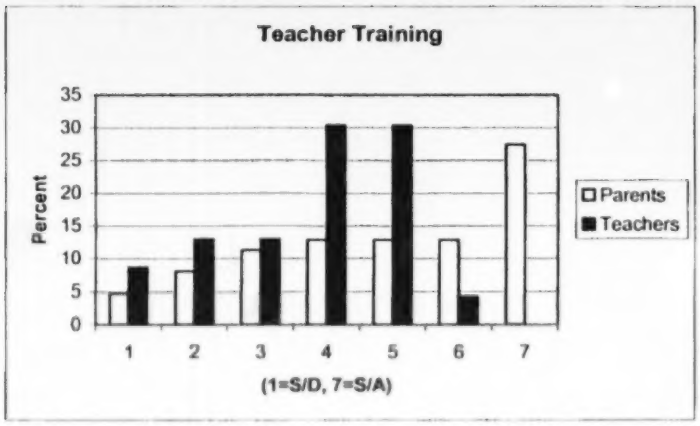
Survey Question:
Teachers use their planning time effectively.

When asked if teachers use their planning time effectively, 69% of the students agreed or strongly agreed that the planning time was used effectively.

Survey Question:
Teachers could use more training to help them take advantage of class periods.

When asked if teachers could use more training to help them take full advantage of class periods, 59% of parents strongly agreed or agreed, and 35% of teachers strongly agreed.

Figure 10



Teacher survey – Mean 3.74
Parent survey – Mean 4.88

Parent comments:

- *"Things would work much better if the classes were restructured to use the whole class period. It does not matter what the schedule it. What we need are better teachers."*
- *"Changes in teaching are really in order. It would not make a difference in either a 7-period or block."*
- *"Training the teacher to help them stay on schedule with the block schedule would help. They should just teach the same amount per day that they did in the 7 period."*
- *"Regardless of the class schedule you can get a good education if the teachers are doing a good job."*

Teacher comments:

- *"There are always new things to learn."*
- *"More workshops with other people in same area, field."*
- *"Applied tech conferences would help us."*
- *"Perhaps, as a faculty, we could use training on using this time to curb [negative] academic attitude[s] of our student body."*

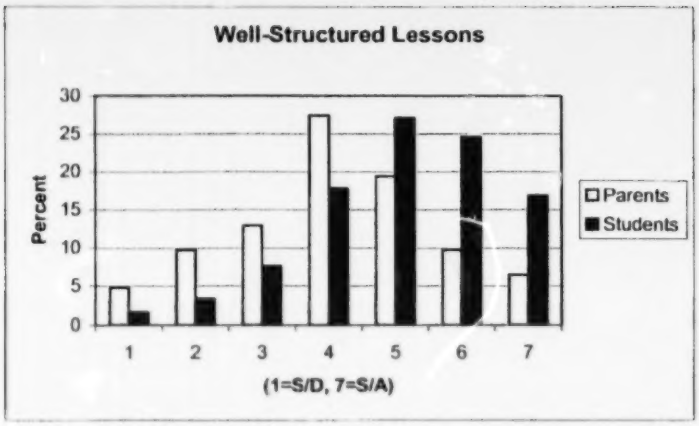
Student comments:

- *"Some teachers don't teach. Some teachers are using the time well and some aren't. Some cram too much [material in before tests]. [When they do,] It's boring."*

Survey Question:
Teachers always have well-structured lessons that fill the whole class period.

When asked if teacher's lessons were always well structured and filled the whole class, 39% of parents strongly agreed or agreed while, 70% of students strongly agreed or agreed.

Figure 11



Parent survey – Mean 4.13
Students survey – Mean 5.09

Student comments:

- *"You can cover a lot more in classes."*
- *"We could use better explanations, and less boring classes."*
- *"There has been better use of class time this year than last year. Long classes are worse than boring."*
- *"Teachers are improving, teachers are getting better."*

Survey Question:
Teachers take full advantage of class periods while teaching my students.

When asked if teachers take full advantage of class periods while teaching, 49% of parents strongly agreed or agreed. 25% had no opinion while 26% of the parents disagreed that teachers do not take full advantage of class time.

Parent comments:

- *"Some teachers stepped up early in the block schedule, but did not continue. For example, the Geography teacher took weather balloons to the football field and set them up the same dimensions as a pyramid to see how large a pyramid really was."*
- *"The major failure is that teacher don't step up to a 90 minute period. They need to use the time better instructing students. [There is] Wasted time in the block schedule."*
- *"There is too much wasted time in class. These teachers never experienced a block schedule growing up and have never been trained on how to teach under these conditions."*
- *"There is no difference between 7 period and block. The teacher just needs to have something for the whole time of the class, or they will have problems regardless."*

Teacher comments:

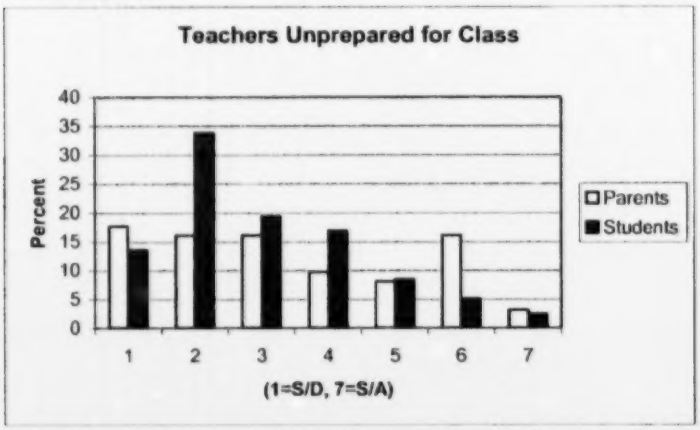
- *"Block scheduling gives students more time to work independently in the classroom. You can do more things in a longer class, test, activity, worksheet, etc, answer questions. Teachers need enough materials and enough activities to keep students going for an hour and a half. When we were trained they told us we had to change teaching modes, teach one concept better. We don't teach more in an hour, but hopefully we teach better. The retention is better. Some kids are done in ten minutes, some take thirty. There's time to answer questions."*

- *"Any learning task can be approached in different ways with different activities, visual, auditory, movement, etc. using these other sense modalities will improve chances to reach all students. You can't lecture the whole time."*
- *"Many of the teachers here use the last half period to allow study time which the students do not use because the students will not stay under control for this period of time."*

Survey Question:
Teachers are unprepared during some parts of the class period on a regular basis.

When asked if teachers were unprepared for classes, only 22% of parents strongly agreed or agreed, and only 16% of students strongly agreed or agreed.

Figure 12



Parent survey – Mean 3.41
Student survey – Mean 2.98

Student comments:

- *"No teachers are prepared."*

Parent comments:

- *"After transition they didn't have two days worth of lecture. Teachers didn't take the entire time."*

Conclusion

The majority of teachers, parents, and students like the block schedule and would like to keep it. Teachers appreciate the longer prep hours. While a couple of teachers have strong feelings against block scheduling, the majority of teachers are strongly in favor of keeping the block schedule. Most feel that the block schedule allows for a broader elective base, but the number of electives available is decreasing as a result of other issues. Parents feel that block scheduling is less stressful for their children, and most want to keep the block schedule. Students are generally positive about the block schedule, because they perceive that it allows for greater flexibility and gives them the opportunity to graduate earlier. Another advantage that is seen by the students of the block scheduling is the fact that students do not potentially have

homework for all 7 classes each night. This is cut down to potentially only 4 classes to work on homework at night if teachers do assign homework.

The many reasons that support block scheduling as drawn from the survey data are that it greatly benefits students. Firstly, it helps students prepare for the ACT, graduation, and college. Secondly, the block schedule allows for schedule and flexibility for the student. However, there are concerns among parents and students about how classroom time is utilized, and the pressing need for teachers to continue with their professional development in order to teach effectively in a longer period.

Much of the data from the surveys suggest that the block schedule is preferable at this time. Students reported that they generally learned better on the block schedule and the teachers were well prepared during class. Some of the benefits of the block scheduling were evident from all groups studied during the research. Students have 1 extra day to do homework and more teacher-student help. The extra time for shop, PE, and other vocational classes have been greatly benefited through the current scheduling plan.

However, the focus groups with the students and Millard High School graduates shed a different light on the instruction that takes place. At the same time, there have been strong undertones of other issues that reside at Millard High School. The lack of class time efficiency has been worrisome to some parents. Students report that some classes are boring, they find it hard to pay attention to the teacher, and one student commented that it was agonizing to sit that long through lectures. Some of the comments have also suggested that there is no increase in the content that is being taught on the block schedule. Parents also expressed their concern that lesson plans have not changed, and currently students do assignments in class rather than as homework. One parent commented that the lack of homework does not allow them to be as involved with their student and their education. They do not have the opportunity to see what is going on by having their student do homework during class time.

With much of this data and the undertones of the suggestions and comments, it is recommended that MHS seek to find a better training solution for teachers on the block schedule. One teacher reported that they now have an opportunity to explore because they are now on the block schedule. This seemed to be the sentiments of a few teachers. If teachers are exploring, they are looking for better ways to teach and utilize their time. We suggest that a training solution be offered that allows more efficient use of class time and also allows students to work on homework as necessary. The reduction of 3 classes of homework allows students to feel less burdened with work while allowing them to practice what they were taught at home. A few comments were made about the academics of MHS by MHS grads, parents, and teachers. Some parents and MHS grads suggested that the teachers do not challenge their students enough, and that they do not prepare them for any advancement in education. They also feel that teachers have not stepped up to the responsibility of the block scheduling to help utilize the time they have with their students. One teacher on the other hand, has commented on the lack of academically minded students at MHS. The teachers suggested that the students are not willing to step up the plate academically and allow themselves to be taught and prepared. There seems to be correlation in these comments though both perspectives are pointing in each other's direction. The gap between the perspectives can be narrowed by informative and quality in-service meeting and trainings.

Recommendations

Recommendations were drawn from the survey and focus group results. Our hope as we complete this study is that the block scheduling, if retained, will be improved in these ways:

1. Continue to track student achievement data (i.e., GPA, SAT scores, and AP scores) to evaluate the effectiveness of the block schedule.

2. Provide ongoing in-service for teachers on imaginative strategies to use the time available. This would include better implementation of existing instructional technology strategies. Such training might include effective use of multimedia, and/or individual projects for students using the UEN website. It might include additional trips to other schools where a form of the block schedule is in effect, correspondence by e-mail or web board discussions of ongoing concerns. It might include new flexible arrangements where teachers in the subject areas where daily contact with students is desired (e.g., math or foreign language) could split a period to obtain daily contact with students.

3. Make a concerted effort to improve communications with parents about school learning and teaching in more than routine ways: web-page (interactive), parent newsletters, surveys and reporting results, community speak ups, etc.

4. A final consideration, voiced by graduates and students is to cut time between class changes from 7 to 5 minutes and add the extra minutes to the students' lunch period.

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APPENDIX A
Questionnaires for Teachers, Parents, and Students

Millard High School
Teacher Survey Questions

Subjects Taught:			Grade Level Taught:	
Math ☐	Science ☐		Freshman ☐	
English ☐	Art ☐		Sophomore ☐	
Social Studies ☐	PE ☐		Junior ☐	
Foreign Language ☐	Music ☐		Senior ☐	
Applied Technology ☐	Special Ed ☐			
Other _____	Health ☐			

Purpose: This survey asks how you personally feel about the current block schedule that is being used by Millard High School. The aim of this survey is to assess students' needs as related to block scheduling and determine if improvements can be made. Remember, there are no right or wrong answers, simply answer as truthfully as possible.

Instructions: For each statement, circle one number in the range between 1 and 7 to describe your closest opinion.

Examples:
(1) If you strongly disagree with the statement, circle 1 for Strongly Disagree.
(2) If you strongly agree with the statement, circle 7 for Strongly Agree.
(3) Or, select one of the remaining numbers between 1 and 7 to describe your feelings.

		Strongly Disagree						Strongly Agree
1.	The current block schedule gives me enough time to plan for my classes.	1	2	3	4	5	6	7
2.	Shorter class periods would improve my ability to teach.	1	2	3	4	5	6	7
3.	The current block schedule helps free up more time for me to plan my classes.	1	2	3	4	5	6	7
4.	I could use more training to help me take full advantage of class periods.	1	2	3	4	5	6	7
5.	I regularly allow students to work independently during class.	1	2	3	4	5	6	7
6.	The current block schedule allows more content to be taught in class.	1	2	3	4	5	6	7
7.	I have sufficient planning time in the current block schedule.	1	2	3	4	5	6	7
8.	I would be better prepared to teach if class periods were shorter.	1	2	3	4	5	6	7
9.	I have adequate prep time to get ready for classes.	1	2	3	4	5	6	7
10.	I prefer longer class periods.	1	2	3	4	5	6	7
11.	Students in my classes find it difficult to pay attention during the whole class period.	1	2	3	4	5	6	7

		Strongly Agree			Disagree			Strongly
12.	Longer class periods allow me to give better instruction.	1	2	3	4	5	6	7
13.	The block schedule allows for more flexibility by school officials.	1	2	3	4	5	6	7
14.	The current block schedule helps me (as a teacher) to better prepare my students for ACT and end-level tests.	1	2	3	4	5	6	7
15.	The current block schedule allows my student to be better prepared for ACT and end-level tests.	1	2	3	4	5	6	7
16.	The current block schedule enhances my students' chances of graduation.	1	2	3	4	5	6	7
17.	The current block schedule allows my students greater flexibility to take Advanced Placement courses & concurrent enrollment courses.	1	2	3	4	5	6	7
18.	The current block schedule frees up more time for my students to take part in extracurricular programs.	1	2	3	4	5	6	7
19.	The current block schedule saves my students time (otherwise wasted in moving between classes) by decreasing time out of class.	1	2	3	4	5	6	7
20.	The current block schedule has resulted in a reduced number of disciplinary issues.	1	2	3	4	5	6	7
21.	The current block schedule gives my students a wide enough range of classes to choose from.	1	2	3	4	5	6	7

If you have additional comments that you feel would be helpful in assessing the needs of the students at Millard High School, please share those here. Thanks for your time!

Millard High School
Parent Survey Questions

Grade Level of Child:	Freshman ☐	Sophomore ☐	Junior ☐	Senior ☐
My children attend(ed) school under the block schedule only ☐				
My children attend(ed) school under both the block schedule and 7-period schedule ☐				

Purpose: This survey asks how you personally feel about the current block schedule that is being used by Millard High School. The aim of this survey is to assess students' needs as related to block scheduling and determine if improvements can be made. Remember, there are no right or wrong answers, simply answer as truthfully as possible.

Instructions: For each statement, circle one number in the range between 1 and 7 to describe your closest opinion.

Examples:
(1) If you strongly disagree with the statement, circle 1 for Strongly Disagree.
(2) If you strongly agree with the statement, circle 7 for Strongly Agree.
(3) If you don't have an informed opinion, circle NA for Not Applicable.
(4) Or, select one of the remaining numbers between 1 and 7 to describe your feelings.

		Strongly Disagree						Strongly Agree	N/A
1.	Teachers take full advantage of class periods while teaching my student.	1	2	3	4	5	6	7	N/A
2.	Shorter class periods would allow my student to learn more.	1	2	3	4	5	6	7	N/A
3.	The current block schedule helps free up more time for the teacher to plan my students' classes.	1	2	3	4	5	6	7	N/A
4.	My student would learn better if he/she had the same class every day.	1	2	3	4	5	6	7	N/A
5.	I like the block schedule because it gives my student more choices in the classes he/she can take.	1	2	3	4	5	6	7	N/A
6.	Teachers need more training to take full advantage of class periods.	1	2	3	4	5	6	7	N/A
7.	Teachers sometimes allow my student to do homework in class.	1	2	3	4	5	6	7	N/A
8.	The current block schedule allows more content to be taught in class.	1	2	3	4	5	6	7	N/A
9.	Teachers are unprepared during some parts of my student's classes on a regular basis.	1	2	3	4	5	6	7	N/A
10.	Teacher's lessons are always well-structured and fill the whole class period.	1	2	3	4	5	6	7	N/A
11.	The block schedule allows my student to better participate in extracurricular activities.	1	2	3	4	5	6	7	N/A
12.	My student has difficulty with attending to the teacher during the full class period.	1	2	3	4	5	6	7	N/A

		Strongly Disagree						Strongly Agree	N/A
13.	Longer class periods result in better instruction for my student.	1	2	3	4	5	6	7	N/A
14.	The block schedule allows administrators to better interact with my student.	1	2	3	4	5	6	7	N/A
15.	The current block schedule helps the teacher better prepare my student for ACT and end-level tests.	1	2	3	4	5	6	7	N/A
16.	The current block schedule allows my student to be better prepared for ACT and end-level tests.	1	2	3	4	5	6	7	N/A
17.	The current block schedule enhances my student's chances of graduation.	1	2	3	4	5	6	7	N/A
18.	The current block schedule allows my student greater flexibility to take concurrent enrollment courses.	1	2	3	4	5	6	7	N/A
19.	The current block schedule frees up more time for my students to take part in extracurricular programs.	1	2	3	4	5	6	7	N/A

If you have additional comments that you feel would be helpful in assessing the needs of the students at Millard High School, please share those here. Thanks for your time!

Millard High School
Student Survey Questions

Current Classes:			Grade Level:	
	Math ☐	Science ☐		Freshman ☐
	English ☐	Art ☐		Sophomore ☐
	Social Studies ☐	PE ☐		Junior ☐
	Foreign Language ☐	Music ☐		Senior ☐
	Applied Technology ☐	Special Ed ☐		
Other		Health ☐		

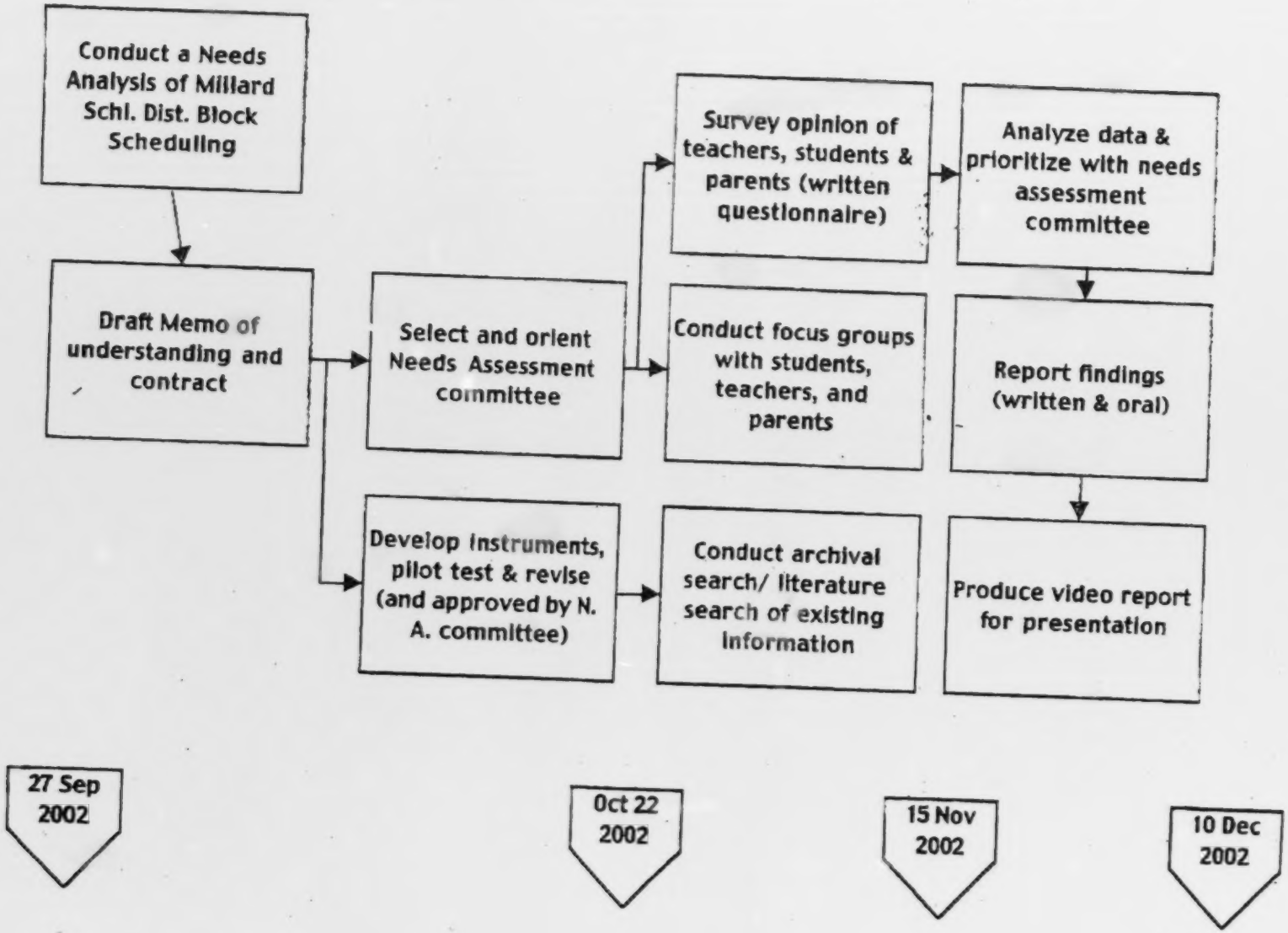
Purpose: This survey asks how you personally feel about the current block schedule that is being used by Millard High School. The aim of this survey is to assess students' needs as related to block scheduling and determine if improvements can be made. Remember, there are no right or wrong answers, simply answer as truthfully as possible.

Instructions: For each statement, circle one number in the range between 1 and 7 to describe your closest opinion.

Examples:
(1) If you strongly disagree with the statement, circle 1 for Strongly Disagree.
(2) If you strongly agree with the statement, circle 7 for Strongly Agree.
(3) Or, select one of the remaining numbers between 1 and 7 to describe your feelings.

		Strongly Disagree						Strongly Agree
1.	Shorter class periods would allow me to learn better.	1	2	3	4	5	6	7
2.	The current block schedule helps free up more time for my teachers to plan my classes.	1	2	3	4	5	6	7
3.	I would prefer to have the same classes every day.	1	2	3	4	5	6	7
4.	I like the block schedule because it gives me more choices in the classes I take.	1	2	3	4	5	6	7
5.	I sometimes do homework in class under the direction of the teacher.	1	2	3	4	5	6	7
6.	The current block schedule allows more content to be taught in class.	1	2	3	4	5	6	7
7.	Teachers use their planning time effectively.	1	2	3	4	5	6	7
8.	Teachers are unprepared during some parts of the class period on a regular basis.	1	2	3	4	5	6	7
9.	Teachers always have well-structured lessons that fill the whole class period.	1	2	3	4	5	6	7
10.	The block schedule gives me more flexibility in participation of extracurricular activities.	1	2	3	4	5	6	7
11.	I find it difficult to pay attention during the whole class period.	1	2	3	4	5	6	7
12.	Longer class periods allow me to learn more about subjects.	1	2	3	4	5	6	7
13.	The block schedule gives me enough time to talk to teachers and administrators when necessary.	1	2	3	4	5	6	7
14.	The current block schedule helps the teacher in preparing me for ACT and end-level tests.	1	2	3	4	5	6	7
15.	The current block schedule allows me to be better prepared for ACT and end-level tests.	1	2	3	4	5	6	7
16.	The current block schedule enhances my chances of graduation.	1	2	3	4	5	6	7
17.	The current block schedule benefits me as I prepare to enter college.	1	2	3	4	5	6	7

If you have additional comments that you feel would be helpful in assessing the needs of the students at Millard High School, please share those here. Thanks for your time!


Conduct a Needs Analysis of Millard Schl. Dist. Block Scheduling
Draft Memo of understanding and contract
Select and orient Needs Assessment committee
Survey opinion of teachers, students & parents (written questionnaire)
Conduct focus groups with students, teachers, and parents
Develop instruments, pilot test & revise (and approved by N. A. committee)
Conduct archival search/ literature search of existing information
Analyze data & prioritize with needs assessment committee
Report findings (written & oral)
Produce video report for presentation
27 Sep 2002
Oct 22 2002
15 Nov 2002
10 Dec 2002

APPENDIX B
Permission Forms Used

INFORMED CONSENT – Focus Groups
Analysis of Block Scheduling for Millard High School

Introduction/Purpose
Professors Byron Burnham and Nick Eastmond in the Department of Instructional Technology at Utah State University (USU) are conducting a study to help determine the efficiency of the current block schedule. You have been asked to take part because of your role as a teacher, parent, or student. There will be approximately 12 teachers, 24 parents, and 24 students who will be participating in this research at Millard High School.

Procedures
If you agree to be in this study as a focus group participant, you should plan on attending one of the focus group sessions administered. This will involve approximately one hour of your time. Four focus group sessions will be located at Millard High School and one focus session will be at USU Education Building in Room 215.

New Findings
During the course of this study, you will be informed of any significant new findings (either good or bad), such as changes in the risks or benefits resulting from participation in the research, or new alternatives to participation that might cause you to change your mind about continuing in the study. If new information is obtained that is relevant or useful to you, or if the procedures and/or methods change at any time throughout this study, your consent to continue participating in this study will be obtained again.

Risks
Your participation in this research is considered to be minimal risk. Every effort will be made to maintain your confidentiality.

Benefits
There may or may not be any direct benefit to you from these procedures. The research team, however, will learn more about block scheduling and the best school system for Millard High School. Findings and recommendations will be presented to the school board at a school board meeting.

Explanation & offer to answer questions
_____ has explained this study to you and answered your questions. If you have other questions or research-related problems, you may reach Professor Nick Eastmond at (435) 797-2642.

Voluntary nature of participation and right to withdraw without consequence Participation in research is entirely voluntary. You may refuse to participate or withdraw at any time without consequence or loss of benefits.

Confidentiality
Research records will be kept confidential, consistent with federal and state regulations. The survey will be number coded. You should not put your name on the survey in order to maintain confidentiality. You may be asked to participate in a video, audio and/or photograph session. A release form will be provided if you agree to participate.

INFORMED CONSENT
Analysis of Block Scheduling for Millard High School

IRB Approval Statement
The Institutional Review Board (IRB) for the protection of human subjects at USU has reviewed and approved this research study. If you have any questions or concerns about this approval you may contact the IRB office at (435) 797-1821.

Copy of consent
You have been given two copies of this Informed Consent. Please sign both copies and retain one copy for your files.

Investigator Statement
I certify that the research study has been explained to the individual, by me or my research staff, and that the individual understands the nature and purpose, the possible risks and benefits associated with take part in this research study. Any questions that have been raised have been answered.

Signature of PI

_____ _____
Byron Burnham Date

A. **Signature of Participant**
By signing below, I agree to participate.

_____ _____
Participant's signature Date

B. **Signature of Parent or Guardian**
By signing below, I agree to allow my student to participate in this study.

_____ _____
Parent or Guardian's signature Date

Youth Assent

I understand that my parent(s)/guardian is aware of this research and that they have given permission for me to participate. I also understand that if I do not want to participate I do not have to and no one will be upset or if I change my mind later and want to stop. I can ask any questions that I have about this research now or later. By signing below, I agree to participate.

_____

Student's signature

_____

Date

Appendix C

Results from the Teacher, Parent, Student Questionnaires

(Quantitative)

(Available upon request – about 20 pages)

Appendix D

Written Comments from Questionnaires

Teachers' Comments:

T3:
I understand how beneficial this schedule is for labs, shops or other "project" classes. However, the day off from Math and foreign language is detrimental to student learning. The students are not disciplined enough to review or study on their own to keep up.

The student body, overall, is lazy academically. The block schedule only gives them an additional day to procrastinate homework. The prep time is great! I definitely enjoy the time for grading and planning. Perhaps, as a faculty, we could use training on using this time to curb academic attitude of our student body.

T5:
I had an experience of teaching for five years on the block schedule in a larger, more academically driven school. In that environment the students really took advantage of the extra time per class. They also recognized that they needed to prepare for a class that they did not attend daily.

In the current situation I find myself caught between what I know *can* work and what I see is *not* working. When a student comes back at Millard High, many of them have not completed the assignments. When they miss a class for a sporting activity, they feel that we are being unrealistic expecting them to say current with the class. Many of them think that because a team takes four or five students from a class of twenty that is out of line in continuing to teach the rest of the students.

The main reasons why I do not feel that the block schedule works at Millard High are as follows:

- Lack of students preparing for an every other day class

- When a student misses one day, they may see me for a minimum of 4 and a maximum of 6 days.
- We actually reduce the time in our academic classes by almost 20% throughout the year.
- Many of the teachers here use the last half period to allow study time which the students do not use because the students will not stay under control for this period of time.

In conclusion, I must admit that I do like the greater amount of prep time, but I feel that in subjects such as math and science the students need the repetition every day rather than every other day. If they miss one day in five for a week it is not as damaging as missing one in three or one in two for a week.

Probably one of the best indicators as to the success of the schedule is to use the ACT scores. When we have 165 of 330 students with a 3.5 or better and an average ACT less than 20, we are approaching the academic areas in an unacceptable manner.

T9:
I like the block for shop and PE class very much!

T10:
It is the only way to go for physical education classes!

T12:
Questions for this survey are poor! They also suggest a lack of understanding about your research project!

T14:
In special education, the block schedule allows some flexibility with class time for example, I have a class that is English/Reading. I can spend longer amounts of time on one or the other as needed. Same for math/study.

T14:
Keep the block schedule!!!!!!

T18:
When we went to the block, I thought it was a bad idea but I enjoy and appreciate it now.

T19:
I was against the block schedule at first but have found it to be much less stressful and more relevant. It is so much better than worrying about every class everyday. I think it helps the students give more time to each class and there is more individual as well as class help after instructions have been given.

T20:
A shortage of teachers, not the scheduling, severly limits the range of classes. Teachers are locked into covering basic classes required for graduation. There is enough prep time to prepare for classes but not nearly enough to read and comment on student writing. Neither block nor the 7-period plan provide "reading-evaluating time" for dealing with papers.

Parents' Comments

P2 The block schedule would be good if teachers were required to change instruction to meet student learning styles. Currently, teachers just lecture and have students do homework.

P3 If the teacher had one 1 ½ hr block every other day, scheduling would be easier, and time would be used more efficiently. I like the block schedule. I have just two concerns. 1) Teachers taking 1 ½ hrs off every 6 hr working day. 2) Teachers thinking "because I don't teach my class tomorrow, we'll watch a video today so my other class doesn't get behind."

P4 I think the block schedule stinks!!

P6 The school needs to get rid of Lowder as he is no good to the basket ball program or any other thing as far as I am concerned. He is no good at all.

P10 I feel the block schedules helps the students keep caught up in their classes.

P13 I have not attended classes with my child, nor am I in a position to observe teachers before or after work; thus I felt unable to answer some questions.

P14 I think the block program has some great benefits however I don't think teachers take advantage and are prepare to teach for the whole class period. If they knew how and what to teach for that time length it would be great. I like the availability it gives for the Ednet class. I think in our school we need to work on scheduling so all the classes kids needs are taught the same period.

P16 I believe that much of my frustration comes from feeling like my kids aren't receiving a solid, basic knowledge of core classes. I'm not sure that the problem is a "block" problem – maybe rather a teaching problem.

P18 My concerns are much more related to other than scheduling concerns – namely finishing the course, the full book, etc.

P22 I feel the block schedule has great potential for better teaching – unfortunately too much time is wasted. Students need more lectures, homework, interaction in solving problems (i.e., math, chemistry), fewer worksheets and no extra credit!

P26 We highly recommend the block schedule.

P28 My student really likes the block program. All of the good teachers have more time to teach concepts.

P35 I have not attended classes with my child, nor am I in a position to observe teachers before or after work; thus I felt unable to answer some questions.

P36 Some of our teachers are way behind in methods of successful teaching. They are lazy or resistant to suggestions. Our students leave their classes without a working knowledge of the class material. Those teachers need to be updated or ousted. Our kids can't produce in college when they move on! And that is critical to their success. We need better teaching on the high school level now. Perhaps they would teach better on the other schedule.
Math – Geometry
Science – Biology
English – not sure about
These are my focus this year.

P37 Please keep block schedule!

P39 Some classes (Chemistry, Math classes, World Civ., English - for mini plays or serious writing term papers) benefit greatly by the block and longer class periods. The others that may be struggling just need to have training or learn to adapt their lesson plan to the block. Some teachers haven't changed their methods of teaching at all and they could improve by seeing the possibilities!

P44 I like the block schedule, it is less stressful on my children.

P46 In High School students are so involved it gives an extra day to complete assignments if other activities conflict with schedule.

P47 The block schedule gives them less homework per day – and when they get homework they have 2 days to do it! I think you should keep block schedule.

P48 It is difficult to fill out this questionnaire. The reason is because some teachers make good use of the time and some of them just sit at their desks all period and let the kids do homework. The block schedule only works if the teacher has enough energy and creativity to fill the period completely. Generally kids seem to like it.

P52 I believe the block schedule is a good and helpful thing.

P55 This school doesn't have enough extra classes to choose from, kids end up in various home economic classes.

P58 I have had children in both program schedules. I much prefer the block. I've also spoken with college children, they likewise enjoyed it. They feel like it was much more effective.

Students' Comments

S2
I think we should be able to take more AP classes.

S9
I think the block schedule is better it helps you get more credits

S11
I feel if we went back to the 7-day period it would make it harder for me to graduate & would give me less of the electives I need to help me with a scholarship.

S14
I think we should keep the block schedule. Ilearn more when I am able to spend a larger period of time on are subject. It also makes it easier to stay caught up and understand what is going on.

S16
Yes, I really enjoy Block Schedule it's a great learning experience.

S18
It's a good school.

S19
I Like the Blcok-Schedule Because It gives me plenty of time to get ready & get homework done for my classes.

S20
I really think the block schedule is beneficial to my education.

S28
Keep the block classes.

S29
Longer Lunch. More time between classes.

S31
Keep the Block Schedule. But less day's.

S32
Longer Lunch!

S38
Longer Lunch hour

S40
I think its stuped to chang the scheule

S42
I Like the Block Schedule and if we go Back to the old ways it would be very boring.

S43
It's hard to have music classes every other day. Even though it s twice as long. The block schedule is effective, and helps the students to learn the material, and gives them an extra day to complete assignments with busy schedules.

S45
I agree with blocked schedual because it provides enough time to accomplish your work. Sometimes it can drag on forever and people tend to get bored and fall to sleep, but if we had all the classes it would be harder because we would feel overloaded and with the very other thing gives us time (an extra day) to do our homework.

S46
I think that with the block schedule the teachers get a preparation period ever day for an hour and a half and personally I think the should only get one for ever 2 days. Plus, I think we should have more classes with shorter time. Like stay on the block schedule but have 5 or 6 classes every day for an hour instead of 4 classes for an hour and a half.

S50
I like the block schedule lots!!

S51
Stick with block scheuduel

S55
Block schedule is awesome! Keep it!

S56
Block Schedule rocks and I love it! Please keep it

S57
I feel that the block schedule benefits the students at MHS because the teachers have more time to help me.

S59
Leave Block Schedule!!!

S61
Don't make me do this again

S62
Don't me do this again!

S63
I strongly support the block schedule

S64
Me and all my friends like the block schedual because it gives us more time to do our homework.

S72
I like the block schedule, don't want it changed.

S74
I like block schedule!

S75
I like the bolok it makes it ease to get homework done

S76
Longer lunch break

S77
Keep the block schedule. Take State. Millard Eagles Football!! Back to Back 2002-2001

S78
Keep the block schedule. Millard High School FB team will take State we are #1

S79
Longer lunch break. But keep the block.

S80
I like the block schedule it gives me more time with the assignment. Some classes need everyday to remember but I feel that the block schedule is better for everyone.

S81
I feel that the block schedule students enough time to complete assignments especially for those who work or are in sports. I deffinitely love and enjoy block schedule.

S84

Keep the block schedule in Millard High School #1 Take State FB

S86
I love the block schedule!!! It gives me more free time after school because I don't have as much homework and it isn't as stressful because I am not learning 7 different subjects every day.

S89
Keep the block schedule!! Thanks!

S90
I think they could shorten each class about 5 minutes and add 20 more minutes on to lunch because a 1 ½ is a long to sit in a class especially in those you don't like. Peace

S92
I like the block. If teachers would better utilize time. So we had no homework.

S93
I love block schedule! It helps me in not becoming as stressful. It helps me get my homework done!

S94
I love block schedule. It helps me to do chores and farm work @ home then do homework the next day if necessary.

S96
I have more time to get work done.

S102
Leave block schedule!

S109
Leave block schedule

S116
I love the block schedule! It has allowed me to learn more, and have more time for school & other activities! I like it way more than 7 periods a day!

S117
I really like the block schedule. It provide more time for homework and the change to talk one on one with a teacher if needed. It also helps that if you're gone, you don't miss the one same class over and over. It's very beneficial.

S118
I like the block schedule because you have more time to do homework between the days you have the same classes.

S119
I like the block schedule because I'm able to study for test in a more seperate manner.

S120
Leave block schedule!

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